Abstract

The invention relates to thin-walled rolling bearings, such as needle bearings, which are produced without the removal of material and the outer rings of which form a structural unit and are produced from a cold-rolled strip.

According to the invention, the outer rings are produced from a cold-formable, fully hardenable steel, a ratio of from 1:20 to 1:5 being set between their wall thickness and the diameter of the bearing needles, and the fully hardened wall having a core hardness of \geq 600 HV and a surface hardness of \geq 680 HV.

The invention makes it possible for bearings to withstand higher static bearings than bearings made from conventional steels while taking up the same installation space.

Figure 1